

CURRICULUM VITAE

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EDUCATION AND TRAINING

Undergraduate: Northwestern University
Evanston, Illinois

Graduate: Northwestern University
Evanston, Illinois

Postgraduate: Postdoctoral Fellow in Genetics (Pediatrics)
University of Rochester School of Medicine and Dentistry
Rochester, NY

Postdoctoral Research Associate in Cell Biology
Baylor College of Medicine
Houston, Texas

Postdoctoral Research Associate, Kleberg Cytogenetics Laboratory
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Exchange scientist, Molecular Tumor Virology
Deutsches Krebsforschungszentrum
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Susanne M. Gollin, Ph.D.

APPOINTMENTS AND POSITIONS

Member, University of Pittsburgh Cancer Institute

Director of Research and Clinical Cytogenetics Consultant
The Pittsburgh Cytogenetics Laboratory
University of Pittsburgh Medical Center

Professor of Human Genetics (with tenure) and Associate Professor of Otolaryngology and Pathology, University of Pittsburgh Graduate School of Public Health and School of Medicine, Pittsburgh, PA

BOARD CERTIFICATION

Diplomate, Clinical Cytogenetics, American Board of Medical Genetics

PROFESSIONAL ACTIVITIES

PUBLICATIONS

Refereed Articles

1. **Gollin SM**, and King RC: Studies of *fs(1)1621*, a mutation that produces ovarian tumors in *Drosophila melanogaster*. *Develop. Genetics* 1981; 2:203-218.
2. Hanks SK, **Gollin SM**, Rao PN, Wray W, and Hittelman WN: Cell cycle-specific changes in the ultrastructural organization of prematurely condensed chromosomes. *Chromosoma* 1983; 88:333-342.
3. **Gollin SM**, and Wray W: A multisample chamber for dehydration and critical point drying. *J. Electron Microscopy Technique* 1984; 1:199-201.
4. **Gollin SM**, and Wray W: Isopycnic centrifugation of mammalian metaphase chromosomes in Nycodenz. *Exp. Cell Res.* 1984; 152:204-211.
5. **Gollin SM**, Wray W, Hanks SK, Hittelman WN, and Rao PN: The ultrastructural organization of prematurely condensed chromosomes. *J. Cell Sci. Suppl.* 1984; 1:203-221.
6. **Gollin SM**, Leary JF, Shoulson I, and Doherty RA: Flow cytometric detection of lymphocyte alterations in Huntington's disease. *Life Sci.* 1985; 36:619-626.
7. **Gollin SM**, Holmquist GP, and Ledbetter DH: Fra(10)(q25): The BrdU effect is substitution-dependent. *Am. J. Hum. Genet.* 1985; 37:208-214.

Susanne M. Gollin, Ph.D.

8. **Gollin SM**, Bock HGO, Caskey CT, and Ledbetter DH: A new family with fra(10)(q25): Spontaneous expression and 100% expression with 100 uM BrdU. *Am. J. Med. Genet.* 1985; 21:643-648.
9. **Gollin SM**, Perrot LJ, Gray BA, and Kletzel M: Spontaneous expression of fra(11)(q23) in a patient with Ewing's sarcoma and t(11;22)(q23;q11). *Cancer Genet. Cytogenet.* 1986; 20:331-339.
10. Kletzel M, **Gollin SM**, Gloster ES, Golladay ES, Jimenez JF, and Berry DH: Chromosome abnormalities in familial hemophagocytic lymphohistiocytosis. *Cancer* 1986; 57(11):2513-2517.
11. Reynolds JF, Daniel A, Kelly TE, **Gollin SM**, Stephan MJ, Carey J, Adkins WN, Webb MJ, Char F, Jimenez JF, and Opitz J: Isochromosome 12p mosaicism (Pallister mosaic aneuploidy or Pallister-Killian syndrome): Report of 11 cases. *Am. J. Med. Genet.* 1987; 27:257-274.
12. Gray BA, and **Gollin SM**: Rapid cell culture procedure for tissue samples. *Am. J. Med. Genet.* 1987; 28:521-526.
13. Chadduck WM, **Gollin SM**, Gray BA, Norris JS, Araoz CA, and Tryka AF: Gliosarcoma with chromosome abnormalities in a neonate exposed to heptachlor. *Neurosurgery* 1987; 21: 557-559.
14. Pettigrew AL, **Gollin SM**, Greenberg F, Riccardi VM, and Ledbetter DH: Duplication of proximal 15q as a cause of Prader-Willi Syndrome. *Am. J. Med. Genet.* 1987; 28:791-802.
15. Edwards DR, Keppen LD, Ranells JD, and **Gollin SM**: Autism in association with fragile X syndrome in females: Implications for diagnosis and treatment in children. *NeuroToxicology* 1988; 9(3):359-365.
16. Keppen LD, Fasules JW, Burks AW, **Gollin SM**, Sawyer JR, and Miller CH: Confirmation of autosomal dominant transmission of the DiGeorge malformation complex. *J. Peds.* 1988; 113:506-508.
17. Przepioroka D, **Gollin SM**, Sulecki M, and Zeigler Z: The use of in situ hybridization for detection of loss of the Y chromosome in normal males and in the evaluation of elderly males with pancytopenia. *Hematologic Pathol.* 1989; 3:177-183.
18. Heo DS, Snyderman C, **Gollin SM**, Pan S, Walker E, Deka R, Barnes EL, Johnson JT, Herberman RB, and Whiteside TL: New head and neck squamous cell carcinoma cell lines: Biology, cytogenetics, and sensitivity to immunologic effector cells. *Cancer Res.* 1989; 49:5167-5175.
19. Storto PD, Saidman SL, Demetris AJ, Letissier E, Whiteside TL, and **Gollin SM**: Chromosomal breakpoints in cholangiocarcinoma cell lines. *Genes Chrom. Cancer* 1990; 2:300-310.

Susanne M. Gollin, Ph.D.

20. Keppen LD, **Gollin SM**, Seibert JJ, and Siskin JE: Roberts Syndrome with normal cell division: A case report. *Am. J. Med. Genet.* 1991; 38:21-24.
21. Sherer ME, Shekhter-Levin S, Krause JR, Joyce RA, and **Gollin SM**: Atypical 7;19 translocation in acute myelomonocytic leukemia. *Cancer Genet. Cytogenet.* 1991; 57:169-173.
22. Keppen LD, **Gollin SM**, Edwards D, Sawyer J, Wilson W, and Overhauser J: Clinical phenotype and molecular analysis of a three-generation family with an interstitial deletion of the short arm of chromosome 5. *Am. J. Med. Genet.* 1992; 44:356-360.
23. Shimizu Y, Demetris AJ, **Gollin SM**, Storto PD, Bedford HM, Altarac S, Iwatsuki S, Herberman RB, and Whiteside TL: Establishment of two new human cholangiocarcinoma cell lines and their cytogenetics and responses to growth factors, hormones, and cytokines or immunological effector cells. *Intl. J. Cancer* 1992; 52:252-260.
24. **Gollin SM**, Storto PD, Malone PS, Barnes L, Washington JA, Chidambaram A, and Janecka I: Cytogenetic abnormalities in an ossifying fibroma from a patient with bilateral retinoblastoma. *Genes Chrom. Cancer* 1992; 4:146-152.
25. Sankary S, Sherwin RN, Malone PS, Janecka I, Barnes L, Storto PD, and Gollin SM: Clonal chromosomal aberrations in a leiomyosarcoma of the sinonasal tract. *Cancer Genet. Cytogenet.* 1993; 65:21-26.
26. Sankary S, Dickman PS, Wiener E, Robichaux W, Swaney WP, Malone PS, and **Gollin SM**: Consistent numerical chromosome aberrations in congenital fibrosarcoma. *Cancer Genet. Cytogenet.* 1993; 65:152-156.
27. Roth AD, Oral A, Przepiorcka D, **Gollin SM**, and Chervenick PA: Chronic myelogenous leukemia and acute lymphoblastic leukemia occurring in the course of polycythemia vera. *Am. J. Hematol.* 1993; 43:123-128.
28. Shekhter-Levin S, Mirro J, Penchansky L, Sherer ME, Wald N, and **Gollin SM**: Acute myeloblastic leukemia with a pericentric inversion of chromosome 6 in a child with Down syndrome. *Cancer Genet. Cytogenet.* 1994; 73: 157-160.
29. Corey SJ, Locker J, Oliveri DR, Shekhter-Levin S, Redner R, Penchansky L, and **Gollin SM**: A non-classical translocation involving 17q12 (retinoic acid receptor) in acute promyelocytic leukemia with atypical features. *Leukemia* 1994; 8:1350-1353.
30. Randhawa PS, Zeevi A, Alvares C, **Gollin S**, Agostini R, Yunis E, Saidman S, Contis L, Demetris AJ, Nalesnik MA: Morphologic and immunophenotypic characterization of a cell line derived from liver tissue with Epstein-Barr virus associated post-transplant lymphoproliferative disease. *In Vitro Cell Develop. Biol.* 1994; 30A(6): 400-406.

Susanne M. Gollin, Ph.D.

31. **Gollin SM** and Janecka I: Cytogenetics of cranial base tumors. *J Neuro-Oncol.* 1994; 20:241-254.
32. Lese CM, Rossie KM, Appel BN, Reddy JK, Johnson JT, Myers EN, **Gollin SM**: Visualization of INT2 and HST1 amplification in oral squamous cell carcinomas. *Genes Chromosomes Cancer* 1995; 12:288-295.
33. Shekhter-Levin S, PENCHANSKY L, Wollman MR, Sherer ME, Wald N, **Gollin SM**: An abnormal clone with monosomy 7 and trisomy 21 in the bone marrow of a child with congenital agranulocytosis (Kostmann Disease) treated with granulocyte colony-stimulating factor: Evolution towards myelodysplastic syndrome and acute basophilic leukemia. *Cancer Genet Cytogenet.* 1995 84:99-104.
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35. Ishwad C, Ferrell RE, Rossie KM, Appel BN, Johnson JT, Myers EN, Law JC, Srivastava S, **Gollin SM**: Loss of heterozygosity of the short arm of chromosomes 3 and 9 in oral cancer. 1996; *Intl J Cancer* 69:1-4.
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37. Ishwad C, Ferrell RE, Rossie KM, Appel BN, Johnson JT, Myers EN, Law JC, Srivastava S, **Gollin SM**: Microsatellite instability in oral cancer. *Intl J Cancer.* 1995; 64:332-335.
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Susanne M. Gollin, Ph.D.

41. Virgilio L, Shuster M, **Gollin SM**, Veronese ML, Ohta M, Huebner K, Croce CM: *FHIT* gene alterations in head and neck squamous cell carcinomas. *Proc Natl Acad Sci USA* 1996; 93:9770-9775.
42. Shekhter-Levin S, Bloom EJ, Swerdlow SH, Sherer ME, Wald N, **Gollin SM**: Acquired monosomy 7 in donor cells in a patient treated for acute lymphoblastic leukemia with bone marrow transplantation. *Cancer Genet Cytogenet* 1997; 95:190-197.
43. Baysal BE, Farr JE, Rubenstein WS, Galus RA, Johnson KA, Aston CE, Myers EN, Johnson JT, Carrau R, Kirkpatrick SJ, Myssiorek D, Singh D, Saha S, **Gollin SM**, Evans GA, James MR, Richard CW III: Fine mapping of an imprinted gene for familial nonchromaffin paragangliomas, on chromosome 11q23. *Am J Hum Genet* 1997; 60:121-132.
44. Dickman PS, Barmada M, **Gollin SM**, Blatt J: Malignancy following retinoblastoma: Secondary cancer or recurrence? *Human Pathol* 1997; 28:200-205.
45. Pollack IF, Hamilton RL, Finkelstein SD, Campbell JW, Martinez AJ, Sherwin RN, Bozik ME, **Gollin SM**: The relationship between TP53 mutations and overexpression of p53 and prognosis in malignant gliomas of childhood. *Cancer Res* 1997; 57:304-309.
46. Shuster M, Bockmühl U, **Gollin SM**: Early experiences with SKY: A primer for the practicing cytogenetic technologist. *Applied Cytogenet* 1997; 23 (2):33-37.
47. Randhawa P, Whiteside T, Zeevi A, Nalesnik M, Alvares C, **Gollin SM**, Demetris J, Locker J: In vitro culture of B-lymphocytes derived from Epstein-Barr virus-associated posttransplant lymphoproliferative disease: Cytokine production and effect of interferon-alpha. *In Vitro Cell Dev Biol - Animal* 1997; 33:803-808.
48. Shekhter-Levin S, Ball E, Swerdlow SH, Li WV, Kapadia SB, Sherer ME, Wald N, **Gollin SM**: A near-haploid bone marrow karyotype in systemic mast cell disease: Is it characteristic of the disease or an incidental finding? *Cancer Genet Cytogenet* 1998; 103:124-129.
49. McLaughlin MR, **Gollin SM**, Lese CM, Albright AL: Medulloblastoma and glioblastoma multiforme in a patient with Turcot Syndrome: Case Report. *Surg Neurol* 1998; 49:295-301.
50. Baysal BE, Potkin SG, Farr JE, Higgins MJ, Korcz J, **Gollin SM**, James MR, Evans GA, Richard CW III: Bipolar affective disorder partially cosegregates with a balanced t(9;11)(p24;q23.1) chromosomal translocation in a small pedigree. *Am J Med Genet* 1998; 81:81-91.
51. Shuster M, Dhar MS, Olins AL, Olins DE, Howell CY, **Gollin SM**, Chaillet JR: Parental alleles of an imprinted mouse transgene replicate synchronously. *Develop Genet* 1998; 23:275-284.

Susanne M. Gollin, Ph.D.

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53. Nussler AK, Vergani G, **Gollin SM**, Dorko K, Gansauge S, Morris SM, Demetris AJ, Nomoto M, Beger HG, Strom SC: Isolation and characterization of a human hepatic epithelial-like cell line (AKN-1) from a normal liver. *In Vitro Cell. Dev. Biol. - Animal* 1999; 35:190-197.
54. Welch WC, Kornblith PL, Michalopoulos GK, Peterson BE, Beedle A, **Gollin SM**, Goldfarb RH: Hepatocyte growth factor (HGF) and receptor (c-met) in normal and malignant astrocytic cells. *Anticancer Research* 1999; 19:1635-1640.
55. Saunders WS, Shuster M, Huang X, Gharaibeh B, Enyenihi AH, Petersen I, **Gollin SM**: Chromosomal instability and cytoskeletal defects in oral cancer cells. *Proc Natl Acad Sci USA* 2000; 97:303-308.
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57. Shekhter-Levin S, **Gollin SM**, Kaplan SS, Redner RL: Involvement of the MLL and RAR alpha genes in a patient with acute monocytic leukemia with t(11;17)(q23;q12). *Leukemia* 2000; 14:520-522.
58. Woolley PV, **Gollin SM**, Riskalla W, Finkelstein S, Stefanik DF, Riskalla L, Swaney WP, Weisenthal L, McKenna RJ Jr: Cytogenetics, immunostaining for fibroblast growth factors, p53, sequencing, and clinical features of two cases of cystosarcoma phyllodes. *Mol. Diagn.* 2000; 5:179-190.
59. **Gollin SM**: Chromosomal Alterations in Squamous Cell Carcinomas of the Head and Neck: Window to the Biology of Disease. *Head & Neck* 2001; 23:238-253.
60. Rao UNM, **Gollin SM**, Beaves S, Cieply K, Nalesnik M, Michalopoulos GK: Comparative genomic hybridization of hepatocellular carcinoma: Correlation with fluorescence in situ hybridization in paraffin embedded tissue. *Mol. Diagn.* 2001; 6:27-37.
61. Bockmühl U, Ishwad CS, Ferrell RE, **Gollin SM**: Association of 8p23 deletions with poor survival in head and neck cancer. *Otolaryngology-Head & Neck Surg* 2001; 124:451-455.
62. Sun PC, Uppaluri R, Schmidt AP, Pashia ME, Quant EC, Sunwoo JB, **Gollin SM**, Scholnick SB: Transcript map of the 8p23 putative tumor suppressor region. *Genomics* 2001; 75:17-25.

Susanne M. Gollin, Ph.D.

63. Hu J, McPherson E, Surti U, Hasegawa SL, Gunawardena S, **Gollin SM**: Tetrasomy 15q25.3 qter Resulting from an Anaphoid Supernumerary Marker Chromosome in a Patient with Multiple Anomalies and Bilateral Wilms Tumors. *Am J Med Genet* 2002; 113:82-88.
64. Huang X, **Gollin SM**, Raja S, Godfrey TE: High resolution mapping of the 11q13 amplicon in oral squamous cell carcinoma cells: Identification of a new gene that is overexpressed in oral cancer. *Proc Natl Acad Sci USA* 2002; 99(17):11369-11374.
65. Reshmi-Skarja S, Huebner A, Handschug K, Finegold DN, Clark AJL, **Gollin SM**: Chromosomal Fragility in Patients with Triple A Syndrome. *Am J Med Genet* 2003; 117A:30-36.
66. Toomes C, Jackson A, Maguire K, Wood J, **Gollin S**, Ishwad C, Paterson I, Prime S, Parkinson K, Bell S, Woods G, Markham A, Oliver R, Woodward R, Sloan P, Dixon M, Read A, Thakker N: The presence of multiple regions of homozygous deletion at the *CSMD1* locus in oral squamous cell carcinoma question the role of CSMD1 in head and neck carcinogenesis. *Genes Chromosomes Cancer* 2003;37:132-140.
67. Telmer CA, An J, Malehorn DE, Zeng X, **Gollin SM**, Ishwad CS, Jarvik JW: Detection and assignment of *TP53* mutations in tumor DNA using peptide mass signature genotyping. *Human Mutation* 2003; 22:158-165.
68. Reing JE, **Gollin SM**, Saunders WS: The occurrence of chromosome segregational effects is an intrinsic and heritable property of oral squamous cell carcinoma cell lines. *Cancer Genet Cytogenet* 2004; 150:57-61.
69. **Gollin SM**: Chromosomal instability. *Curr Opin Oncol* 2004; 15:25-31.
70. Ragin CCR, Reshmi SC, **Gollin SM**: Mapping and analysis of HPV16 integration sites in a head and neck cancer cell line. *Int J Cancer* 2004; In Press.
71. Hewitt C, Wilson P, McGlenn E, MacFarlane G, Papageorgiou A, Woodward RTM, Sloan P, **Gollin SM**, Patterson I, Parkinson KK, Read AP, Thakker N: DLC1 is unlikely to be a primary target for deletions on chromosome arm 8p22 in head and neck squamous cell carcinoma. *Cancer Lett* 2004; In Press.
72. Cook JR, Aguilera I, Reshmi-Skarja S, Huang X, Yu Z, Gollin SM, Abbondanzo SL, Swerdlow SH: Lack of PAX5 rearrangements in lymphoplasmacytic lymphomas: Reassessing the reported association with t(9;14). *Hum Pathol* 2004; In Press.

Selected Reviews, Invited Published Papers, Proceedings of Conferences and Symposia, Monographs, Books and Book Chapters

Susanne M. Gollin, Ph.D.

Gollin SM: Cancer Cytogenetics. pp. 135-142. In: *Hematology: Clinical and Laboratory Practice*. Bick RL, Ed., Mosby-Year Book, Inc., St. Louis. 1993.

Gollin SM: Genetic mapping. pp. 199-202. In: *1986 McGraw-Hill Yearbook of Science and Technology*. McGraw-Hill Book Co., New York. 1985.

Gollin SM, Reshmi-Skarja S (2003) Mitosis: Chromosomal Rearrangements During. In: *Encyclopedia of the Human Genome*. Nature Publishing Group, London.

Gollin SM (November 2003) Cell Culture Contamination. In: *Nature Encyclopedia of Life Sciences*. London: Nature Publishing Group. <http://www.els.net/> [doi:10.1038/npg.els.0002560]

Gollin SM (2004) Acquired chromosome abnormalities: the cytogenetics of cancer. In: *Encyclopedia of Genetics, Genomics, Proteomics and Bioinformatics*. L. Jorde, Ed. John Wiley and Sons, London. In Press, February, 2004.